

### SPEED AND ACCELERATION PROBLEMS

**DIRECTIONS:** Answer the following story problems using the formulas for speed and acceleration.  
Be sure to show all steps.

1. Mary and Sue were running in the park. Mary ran 3 Km in 1.5 hours while Sue ran 4 Km in 2 hours. What was the speed of Mary and Sue.
2. Terry threw a baseball from the fence to home plate ( 300 M) It took the ball 6 seconds to reach the plate. What was the speed of the ball.
3. A tuna was swimming at 40 km/hr, it saw a school of squid and increased its velocity to 75 km/hr to catch them. The change in velocity only took .8 seconds. What was the tuna's acceleration?
4. A hopkins fishing lure when cast leaves the rod tip at a velocity of 18 m/s, it hits the water 4.5 seconds later at a velocity of 7 m/s. What is the lure's acceleration?
5. Dana ran a 10 K race in a time of 55 minutes. What was her speed?
6. Sari fell off of her bunk bed a distance of 2 meters. If it took her 1.5 seconds to hit the floor, what was her speed?
7. A golfer was walking a Florida course at 4 km/hr, saw an alligator and in 0 .72 seconds was running 22 km/hr. What was the golfers acceleration.
8. Jamaal kicked a ball 150 meters. If it took the ball 5 seconds to hit the ground, what was the speed of the ball?
9. Tarzan was swinging on his vine at a velocity of 35 km/hr. Cheetah distracted him and he hit a tree. In a span of 0 .2 seconds he stopped. What was his acceleration?
10. A penny dropped from a hot air balloon hit the ground at a velocity of 574 m/s. How long was the penny airborne?